

PATENT  
09/766,253  
Docket 018/180c

CLAIM AMENDMENTS

1 to 7. (Cancelled)

8. (Currently Amended) A method for detecting the presence of polynucleotide sequences encoding at least a portion of telomerase in a biological sample, comprising the steps of:

a) ~~providing a biological sample suspected of containing a polynucleotide encoding at least a portion of telomerase;~~

b) ~~determining a nucleotide sequence contained in the polynucleotide;~~

c) ~~comparing the sequence determined in step b) with telomerase motifs 0, 1, 2, and 3; and then~~

d) ~~deciding that the sample contains a polynucleotide sequence encoding at least a portion of telomerase if the sequence determined in step b) contains motifs 0, 1, 2, and 3~~

a) obtaining an amino acid sequence encoded in a polynucleotide contained in the biological sample;

b) comparing the amino acid sequence with the telomerase amino acid motif

W-X<sup>1</sup>FFY-X<sup>1</sup>TE,

wherein X<sup>n</sup> is a sequence of "n" unspecified amino acids; and then

c) determining that the sample contains a polynucleotide encoding at least a portion of telomerase if the sequence obtained in step a) contains said telomerase amino acid motif.

9 to 12. (Cancelled)

13. (Withdrawn) An antisense molecule comprising the nucleic acid sequence complementary to at least a portion of the nucleotide of SEQ. ID NO:100.

14. (Withdrawn) A pharmaceutical composition comprising the antisense molecule of claim 13, and a pharmaceutically acceptable excipient.

15 to 17. (Cancelled)

18. (Withdrawn) A purified antibody which binds specifically to a polypeptide comprising at least a portion of the amino acid sequence of SEQ. ID NO:101.

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19. *(Withdrawn)* A pharmaceutical composition comprising the antibody of claim 18 and a pharmaceutically acceptable excipient.
20. *(Withdrawn)* A method for detecting the expression of human telomerase in a biological sample comprising the steps of:
- a) providing:
    - i) a biological sample suspected of expressing human telomerase protein; and
    - ii) the antibody of claim 18;
  - b) combining said biological sample and said antibody under conditions such that an antibody:protein complex is formed; and
  - c) detecting said complex wherein the presence of said complex correlates with the expression of said protein in said biological sample.
21. *(Currently Amended)* The method of claim 8, wherein the telomerase is a telomerase of a single-celled eukaryotic-cell eukaryote.
22. *(Previously Presented)* The method of claim 8, wherein the telomerase is a mammalian telomerase.
23. *(Previously Presented)* The method of claim 8, wherein the telomerase is a human telomerase.
24. *(Currently amended)* The method of claim 8, wherein the telomerase polynucleotide contains SEQ. ID NO:100.
25. *(New)* The method of claim 8, further comprising comparing the sequence determined in step b) with the reverse transcriptase motif R-X<sup>2</sup>-PK-X<sup>4</sup>-R-X<sup>1</sup>-I.
26. *(New)* The method of claim 8, further comprising comparing the sequence determined in step b) with the reverse transcriptase motif F-X<sup>3</sup>-D-X<sup>3</sup>-CYD.

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27. (New) The method of claim 8, comprising deciding that the sample contains a polynucleotide sequence encoding at least a portion of telomerase if the sequence determined in step b) contains the amino acid motif

$h_1-X^1-W-h_2-X^4-h_3-X^2-h_4-h_5-h_6-h_7-FFY-X^1-TE,$

wherein

$h_1$  is L or I;

$h_2$  is L or I;

$h_3$  is V or I;

$h_4$  is L or I;

$h_6$  is L or I;

$h_6$  is R or Q; and

$h_7$  is S, T or C.